

**RESPONSES TO D. DICKERSON'S (EPA) COMMENTS ON THE
2008 DRAFT ALTERNATIVE 4 COST ESTIMATE
DATED JULY 2008**

GENERAL COMMENTS

1. **Comment:** To be consistent with previous estimates, beginning in 2011 the \$15 million/year funding level should increase with inflation (assume 3.5% annual escalation).

Response: The change was made as suggested.

2. **Comment:** Once the \$15m/yr spreadsheet is finalized, we need to develop one for the \$80m/yr scenario. Whether or not we need a \$30m/yr one as well is TBD.

Response: The \$80M/yr spreadsheet will be prepared next.

3. **Comment:** Yearly activities: recommend the assumed activities be modified as follows:

a. in 2010, assume the ROD amendment is issued in time for summer operations, which would likely be demob Areas C and D, prep Area C for CAD cell work, trailer relocations, etc. Thus the 3rd year of hydraulic dredging currently listed in 2010 would not take place.

b. for the next draft, I'd like to see the impact of NOT installing the full perimeter sheet pile wall, but rather using a full perimeter silt curtain instead (piling currently takes place in years 4 and 5).

c. once the upper harbor CAD is filled with dredge material, best practice is to wait 6 to 12 months prior to capping to allow for consolidation and development of bearing capacity. Depending on how the next draft works out (ie completion of CAD mid year or end of year) we need to keep this in mind when listing each year's activities (capping is currently at year 18 or 2025).

Response:

a. Only two more years of hydraulic dredging will take place (2008 and 2009). Demobilization of Areas C and D and installation of sheets for the perimeter silt curtain will begin in 2010.

b. The cost of installing the full perimeter sheet pile wall was modified to reflect installing a full perimeter silt curtain instead. It is assumed that 30 days will be required for the installation now instead of 72 days. The silt curtain removal cost is the same as the sheet pile removal cost.

c. In this version, the CAD cell is filled in year 2019 and then capped in year 2021.

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4. **Comment:** Fixed Costs:

- a. overall I'd like the Corps to double check that these are the appropriate 2008 costs to base this spreadsheet on. For example, I believe Battelle data base costs have been reduced to approximately \$200,000 for 2008 (currently listed as \$303,616).
- b. Mob/Demob: rather than simply escalating this cost for inflation when changing to a) lower harbor dredging (currently at year 17) and then b) wetland remediation (currently at year 26) shouldn't these be recomputed based on the new types of equipment to be used?
- c. O&M: as indicated previously, once Areas C and D have been demobilized (say in 2010-11), these costs should decrease dramatically since we'll only be responsible for the app. 3 western acres of Area C (relocated office areas and sand and gravel load out area).

Response:

- a. Jacobs and Battelle fixed costs were updated to reflect 2008 contract award costs per EPA request. NAE expenditures were escalated from 2005 actuals. The hydraulic dredging unit rate cost was also updated to reflect the current rate. Because these fixed costs and unit rates were updated for Alternative 4, they are no longer consistent with previous Alternatives 1, 2, and 3 cost estimates. In Alternatives 1, 2, and 3 the unit rates were held consistent across the alternatives for comparison purposes. Therefore, the Alternative 4 cannot be directly compared to previous alternatives and is a stand-alone cost estimate.
- b. The mob/demob cost for lower harbor dredging was recalculated, and is similar to the CAD cell excavation mob/demob cost due to similar equipment. The mob/demob cost for wetland remediation includes equipment for excavation, remediation and temporary road construction.
- c. Reevaluation of the current O&M costs identified approximately 75% of costs that could be eliminated. Thus, the annual O&M cost in years starting in year 2012 are 25% of the annual O&M costs for years 2008, 2009, 2010, and 2011.

5. **Comment:** 13th line item "COST SHARE AMOUNT – or – (FUNDING NEEDED)": since "cost share amount" may be prone to misinterpretation we should reword this to something like "Remaining funding or (FUNDING NEEDED)".

Response: The change was made as suggested.

6. **Comment:** 14th line item "APPLICABLE UNIT RATE NON-TSCA HYD DREDGING (\$/CY)": if this includes T&D then the line item description should

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clarify as much - maybe by simply adding "AND T&D" between "DREDGING" and "\$/CY".

Response: This line item is a remnant from previous alternative cost estimates, and was left in place to reduce adjustments to the spreadsheet. This line item is now hidden since Alternative 4 does not utilize non-TSCA hydraulic dredging. In previous alternatives, the unit rate cost did not include T&D.

7. **Comment:** As indicated previously, the daily removal rate for mech. dredging in the lower harbor (MUs 33 – 37) with disposal into a lower harbor CAD cell should be significantly greater than the 500 cy/day used for the upper harbor. Footnote/Assumption #11 must be edited accordingly.

Response: The removal rate for dredging MUs 33-37 was increased to 3,000 cy/day from 500 cy/day to be consistent with Alternative 3.

8. **Comment:** Wetland unit rate: how does the removal rate in the most recent North of Wood St effort compare to the 300 cy/day used in this estimate (see note #11)?

Response: The 450 cy of material was removed in three days. Therefore the removal rate was 150 cy/day. Note #11 not found.

9. **Comment:** Note #13: recommend changing post-CAD cap monitoring to once per year instead of twice per year (consistent with the ou3 cap).

Response: The assumption (now Note #16) and cost were modified to reflect one bathymetric survey per year and one sampling round per year. Also, per EPA request, cap monitoring was included in only the first year after the cap was installed (i.e., year 2020), assuming cap monitoring would be performed by others in subsequent years.

10. **Comment:** Other editorial corrections may be needed on the notes, but I'll wait to see the next draft before commenting on those.

Response: Comment noted.

The following changes were made based on separate verbal comments and e-mails received from EPA.

- a. A tipping fee of \$40/cy was included for the material disposed of into the City CAD cell. The estimated cost was provided by EPA.

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- b. The NSTAR crossing cost was included in year 2012, following sand and gravel removal and prior to MU dredging. The cost was escalated from an 2008 estimate provided by NAE of \$1.2 M.
- c. The wetlands sample results were compiled on maps by Jacobs and evaluated by EPA. The current estimate of 50,144 cy will be used.